



# MI Travel Counts

## Michigan's Statewide Household Travel Survey

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## MDOT Model Improvement Program



### Three phases:

- Phase I:** Research of modeling practices, development of new model specifications, and identification of required data. *Spring 2001 - Winter 2002*
- Phase II:** Data collection (MI Travel Counts) *November 2003 - August 2005*
- Phase III:**
  - Phase III a. - Updating current 4-step models with MI Travel Counts data.
  - Phase III b. - Research of Tour/Activity Based Models

## Why do a survey?



- Travel data was last collected by MDOT in the 1960s - 1970s
- Using default data from the National Cooperative Highway Research Program (NCHRP)
- Suspect that Michigan's travel patterns differed from NCHRP data

## Influences on Michigan's unique travel



- Automobile reliance
- Relatively low transit usage
- International border crossings
- Michigan is a peninsula state



## Background



- Conduct survey to obtain data for the statewide model, small urban models, and TMA models
- Seven sample areas statewide
  - 2,040 household target per sample area for 14,000+ total.
  - Additional households in Detroit area thru separate SEMCOG contract

## Background

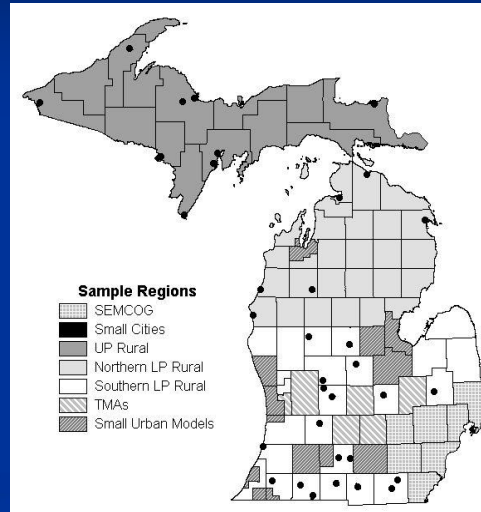


- 48 hours of travel information collected from all household members
- Travel days while school was in session April 2004 to February 2005
- Cost: \$2,075,000

# Statewide Sample Design



- Seven sampling areas
  1. SEMCOG (S.E. Michigan & Detroit)
  2. TMA areas (200,000+ population)
  3. Small Urban Model areas (50,000 – 200,000 population)
  4. Small Cities (5,000-50,000 population)
  5. Rural Upper Peninsula
  6. Rural Northern Lower Peninsula
  7. Rural Southern Lower Peninsula
- Households randomly selected within the seven sampling areas



# Stratification



- Households stratified by household size, number of workers and auto availability
- Cells collapsed if necessary based on auto sufficiency

| Household Size = 2 |       |     |     |  |       |
|--------------------|-------|-----|-----|--|-------|
|                    | Autos |     |     |  |       |
| Workers            | 0     | 1   | 2+  |  | Total |
| 0                  | 36    | 73  | 89  |  |       |
| 1                  |       | 75  | 121 |  |       |
| 2                  |       | 30  | 211 |  |       |
| 3+                 |       |     |     |  |       |
| Total              | 36    | 121 | 421 |  | 634   |

## General Methodology



- Pre-notification letter to households
- Phone recruitment (land lines only)
- Mail out of survey materials
- Phone retrieval (preferred) or mail-in
- Optional Web retrieval for portion of study

## General Methodology (con't)



- Incentives for some household types at end of study
- Data deliveries every 2,000 households
- Checks of data by prime, sub-consultant, and MDOT
- Retrospective long distance travel component
- PR firm for name, logo, Website, and PR campaign

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